

(11) (A) No. 1 133 712

(45) ISSUED 821019

(52) CLASS 68-45
C.R. CL. 210-6

(51) INT. CL. ³ B65D 83/06, 33/36

(19) (CA) **CANADIAN PATENT** (12)

(54) POUCH DISPENSER FOR RINSE WATER ADDITIVES AND METHOD

(72) Bolan, Joseph A.,
U.S.A.

(73) Granted to Bristol-Myers Company
U.S.A.

(21) APPLICATION No. 350,826

(22) FILED 800429

(30) PRIORITY DATE U.S.A. (079,391) 790927

No. OF CLAIMS 23

POUCH DISPENSER FOR RINSE WATER
ADDITIVES AND METHOD

I. Description:

BACKGROUND OF THE INVENTION

5. This invention relates to an article for dispensing a washing machine rinse water additive such as a fabric softener and a method of treating laundry with a fabric softener or other rinse water additive. More specifically, laundry is treated with a rinse water
10 additive such as a fabric softener during the rinse cycle of a washer by adding at the beginning of the wash cycle a dispensing article which is adapted to release the additive during the spin cycle of the washer. The dispensing article is a collapsible pouch
15 fabricated from a water insoluble material having a pressure sensitive valve.

For years rinse water additives such as fabric softeners were added to a washer by measuring the desired amount of additive and manually adding that
20 amount during the rinse cycle of the washer. This required that the washer be monitored to determine the precise time at which the rinse cycle began. In



the case of fabric softeners, this was required due to the chemical incompatibility of the softener with the soaps and anionic detergents used to launder fabrics.

Several free body dispensers have been disclosed in the prior art for dispensing rinse water additives such as fabric softeners. Examples of these dispensers have been disclosed in U.S. Pat. No. 2,956,709 to Nison, et. al., U.S. Pat. No. 3,108,722 to Torongo, Jr., et. al., U.S. Pat. No. 3,180,538 to Brown, et. al., U.S. Pat. No. 3,215,311 to Nison, et. al., U.S. Pat. No. 3,268,120 to Durst, and U.S. Pat. No. 3,888,391 to Merz. These references disclose centrifugal dispenser capsules which contain a rinse water additive and which have one or more openings sealed by stoppers. During the spin cycle of the washer these stoppers are forced open by the centrifugal force created by the spinning action of the washer. When the stoppers are opened the additive contained in the capsules is released, thereby providing the additive to the rinse cycle which immediately follows the spin cycle. The stoppers disclosed in these references are maintained in a closed position by a variety of devices such as springs and weights. None of the prior art references disclose a dispenser such as the pouch of this invention where an orifice or orifices are formed as an integral part of the pouch which do not have stopper means to retain the additive within the pouch.

SUMMARY OF THE INVENTION

5 The present invention encompasses a dispenser for
rinse water additives comprising a pouch fabricated from a
collapsible water insoluble material having two chambers,
an upper and a lower chamber, and having at least one
10 orifice or opening formed in the wall which separates the
two chambers. The length of the orifice or orifices should
be from about 1/8 inch to 1 inch. While the lower chamber
is sealed with the exception of the orifice, the top of the
upper chamber is open. The relative lengths of the upper
15 and lower chamber vary depending on the size of the pouch;
however, the upper chamber should be at least 1/4 inch in
length as measured from the top of the pouch to the wall
which separates the upper and lower chambers. The rinse
water additive is contained in the lower chamber of the
20 pouch and has the viscosity of from that of water to that
of a gel. The pouch is added to an automatic washer at
the beginning of the wash cycle. During the first spin
cycle which precedes the rinse, the centrifugal forces
created by the spinning of the tub collapse the pouch
thereby forcing the fluid located in the lower chamber
through the orifice and out of the pouch.

25 The present invention also encompasses a method
for treating laundry with a rinse water additive which
comprises releasing a rinse water additive to the rinse
water of an automatic washer by adding along with the
laundry at the beginning of the wash cycle a dispenser of
this invention.

30 It is an object of this invention to provide
a simple unitary device which can be added at the
beginning of the wash cycle and which will automatically

dispense a rinse water additive such as a fabric softener during the spin cycle of the washer thereby making the additive available during the rinse cycle.

5 It is a further object of this invention to provide a unitary dispenser which contains a pre-measured amount of the rinse water additive.

BRIEF DESCRIPTION OF THE DRAWINGS

10 Other objects, features and advantages of the present invention will become more fully apparent from the following detailed description of the preferred embodiment, the appended claims and the accompanying drawing in which:

15 Figure 1 is a front elevation view of the preferred embodiment of the dispenser of the present invention adapted for shipment in a sealed condition.

Figure 2 is a front elevation view of the dispenser of the Figure 1 and the shipping seal of Figure 1 showing the shipping seal separated from the dispenser.

20 Figure 3 is a cross sectional view of the dispenser taken on the 3-3 line of Figure 1.

Figure 4 is a front elevation view of an alternate embodiment of the present invention.

Figure 5 is a front elevation view of yet another alternate embodiment of the present invention.

25

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred embodiment of the present invention is illustrated by way of example in Figures 1-3. With

specific references to Figures 1 and 3, the dispenser pouch 1 is rectangular in shape and it is formed by heat sealing two pieces 11 and 12 of approximately equisized collapsible water insoluble material together along their marginal edges 13, 14, and 15; additionally to provide a seal for shipping, marginal edge 16 is heat sealed. One piece 12 is substantially thicker than the other piece 11. The pouch has two chambers, an upper chamber 2 and a lower chamber 3, which are separated in part by a wall 6, which is disposed within the pouch. Wall 6 does not seal the upper chamber 2 from the lower chamber 3 but leaves two openings or orifices 4 and 5. Two notches 8 and 9 are provided in heat sealed areas 15 and 13 for the removal of the shipping seal 16. The rinse water additive 7 is contained within the lower chamber 3 and the upper chamber 2 is empty.

Also illustrated by way of example in Figures 4 and 5 are two alternate embodiments of the present invention. With reference to Figure 4, the dispenser pouch 20 is shown without the seal which is used for shipping. Dispenser pouch 20 is rectangular in shape. The pouch has two chambers, an upper chamber 21 and a lower chamber 22 which are separated by a wall 23. In the wall 23 there is an opening or orifice 24. While the lower chamber 22 is for the most part closed by the wall 23 the top of the upper chamber 25 is left open. With reference to Figure 5, dispenser pouch 30 is again shown without the shipping seal. The dispenser pouch 30 is rectangular in shape and has two chambers, an upper chamber 31 and a lower chamber 32. The chambers 31 and 32 are separated by a wall formed by two diagonally opposed members 34 and 35. There is an opening or orifice 36 formed between the two members 34 and 35.

Before using the dispenser of this invention, the heat seal used for shipping must be removed. This can easily be done by cutting off the top of the pouch between

the two notched areas. After removing this seal the dispenser containing a pre-measured amount of a rinse water additive such as a fabric softener is added to an automatic washer at the beginning of the wash cycle. Due to the air
5 entrapped in the lower chamber of the pouch during the process of filling it with the additive, the pouch will tend to float. However, this flotation is not required to retain the additive in the pouch during the wash cycle. Due to the fact that the side walls of the upper chamber
10 are sealed and the fact that the area to either side of the orifice or orifices is sealed the upper chamber will tend to stay collapsed. This is in conjunction with fluid, is sufficient to keep the additive from flowing out of the pouch. However, once the wash cycle is completed and the first spin cycle begins, the centrifugal
15 force created by the spinning of the tub will compress the pouch and force the additive up through the orifice and out of the pouch thereby dispensing the additive into the washer where it will treat the fabrics.

20 The pouch of this invention can be made from any collapsible water insoluble material which is relatively inert with respect to the rinse water additive. Examples of such materials are polyethylene, polypropylene, paper laminate, nylon, polystyrene, aluminum foil, flexible
25 vinyls, vinylidene resins, polyester, polyurethane, ionomer, and laminates thereof. A suitable range of thickness for these materials is from about 1 Mil to about 50 Mils. (The term "Mil" as used herein means one one-thousandth of an inch.) The preferred range of thicknesses is from about
30 1 Mil to about 6 Mils.

The wall which is disposed within the pouch can be fabricated by heat sealing, gluing or any technique known in the art for joining two pieces of material. However, if glue is used it must be relatively inert with
35 respect to the additive contained within the pouch. The

length of the wall will be determined by the size of the orifice required, within a given pouch size. The placement of the wall from the top of the pouch will also be determined by the pouch size since the placement of the wall from the top of the pouch will determine the relative sizes of the two chambers. The wall should be placed so that the upper chamber in its collapsed state, prior to being forced open during the spin cycle of the washer, is sufficiently large to keep the fluids from leaving the lower chamber during the wash cycle. For example, in a small pouch measuring approximately 1 inch x 2 inches the wall should be at least 1/4 of an inch from the top of the pouch. In large pouches the wall should be spaced further from the top of the pouch.

The size of the orifice or orifices is dependent on the rigidity of the material used for making the pouch and the viscosity of the particular additive used. For example, as the flexibility of the pouch decreases the larger the orifice should be and as the viscosity of the fluid increases the larger the orifice or orifices should be, while as the flexibility of the pouch increases and the viscosity decreases the smaller the orifice or orifices should be. A suitable range of sizes for the orifice would be between about 1/8 inch to 1 inch in length.

The rinse water additives which may be used in the present invention are the various cationic fabric softeners dispersed in water, alcohol or suitable solvents, anti-resoil agents, bacteriocides, optical brighteners, anti-static agents which are not of the cationic softener types, enzymes, bleaches, detergents, detergent additives or any other fabric conditioning agent. These additives may be used separately or in combination where the agents to be combined are chemically compatible.

A suitable range for the viscosity of the additives used should range from that of water, to that of gel. The preferred viscosity range would be from about 2000 centipoise to about 4000 centipoise.

5 The pouch of this invention can assume a variety of shapes. For example, it can be square, rectangular, round or pillow shaped. The pouch can also vary in size, however, the size will vary with the amount of additive used, in that the pouch must
10 be of sufficient size to accommodate the additive.

 The preferred pouch dispenser of this invention is rectangular in shape and has the internal dimensions of 2 inches x 3 inches. The pouch is heat sealed along three of its marginal edges thereby leaving the top of the
15 pouch open. The sealed areas are approximately 1/16 inch wide. The pouch has a horizontal wall disposed within the pouch which is located 1/2 inch from the top of the pouch and which is 1 1/2 inches long. Located on either side of the wall adjacent to the heat sealed marginal edges
20 of the pouch are two orifices each 1/4 inch in length. The lower chamber contains from about 20 to about 30 grams of a rinse water additive having the viscosity of approximately 2050 centipoise. This pouch is constructed from two approximately equisized pieces of low density poly-
25 ethylene where one piece has a thickness of approximately 1.5 Mils and the other a thickness of 6 Mils.

 One method of forming the pouch is by taking two equisized pieces of collapsible water insoluble material and heat sealing three corresponding edges so that the
30 top is left open. Once the pouch is constructed, it is filled with an additive. After the additive is in the pouch a horizontal wall is fabricated within the pouch by

heat sealing. Additionally a shipping seal may be added to the pouch by heat sealing the top marginal edge of the pouch. Two notches may be formed on either side of the pouch just below the shipping seal to provide for the removal of the seal.

The pouch is used by first removing the shipping seal if such has been provided. This is done by cutting off the top sealed area of the pouch between the two notches. Once this is done the pouch can be added to an automatic washer at the beginning of the wash cycle along with detergent and the fabrics which are to be laundered. After the initiation of the spin cycle the centrifugal forces created by the spinning action will collapse the pouch thereby forcing the additive out of the pouch and into the machine. As the rinse water enters the machine the additive is dispersed throughout the tub where it will contact and treat the fabrics in the machine.

The following examples illustrate the present invention.

Example 1

Five pouches having the internal dimensions of 1 inch x 2 1/2 inches were constructed from a 3-4 Mils thick, low density polyethylene and filled with a cationic fabric softener composition having a viscosity of approximately 85 centipoise at 80°F and approximately 57 centipoise at 100°F. A 3/4 inch horizontal wall was then formed in each of the pouches by heat sealing, 1/2 inch from the top of the pouch, thus leaving a 1/4 inch orifice in each pouch located adjacent to one of the heat sealed edges. Each pouch was then added along with one cup of laundry detergent and fabrics to a test wash performed under the conditions of Test Wash A or Test Wash B.

The Test Wash A consisted of a wash with a 10 minute wash cycle and a 2 minute rinse cycle with a wash water temperature of 100°F. Test Wash B consisted of a wash conducted as in A except that the wash water temperature was set at 80°F. The pouches tested were weighed at three separate intervals before they were added to the washer, at the end of the wash cycle, and at the end of the rinse cycle. The values obtained by weighing the pouches are given below. The weight of an empty pouch was determined to be about 0.5 grams.

Test Wash A

	<u>Initial Wt. of Pouch & Additive (Grams)</u>	<u>Wt. of Pouch & Additive After Wash Cycle (Grams)</u>	<u>Wt. of Pouch & Additive at End of Rinse Cycle (Grams)</u>
15	11.2	11.0	2.3
	11.0	10.8	1.7
	11.0	10.7	4.0

Test Wash B

	<u>Initial Wt. of Pouch & Additive (Grams)</u>	<u>Wt. of Pouch & Additive After Wash Cycle (Grams)</u>	<u>Wt. of Pouch & Additive at End of Rinse Cycle (Grams)</u>
20	10.8	10.3	1.4
25	10.8	9.8	0.5

The above results show that substantially all of the additive was released during the rinse cycle, while only minor amounts of the additive were released during the wash cycle.

Example 2

Two pouches having the internal dimensions of 2 1/2 inches x 4 inches were constructed in the manner described in Example 1, from low density polyethylene, and filled with a cationic fabric softener composition having a viscosity of approximately 9 centipoise at 80°F. A 2 1/4 inch horizontal wall was then formed in each of the pouches 1/2 inch from the top of the pouch, thus forming a 1/4 inch orifice in the pouch.

The pouches were then each added to a test wash conducted in accordance with Test Wash B described above, along with 1 cup of laundry detergent and fabrics. The pouches were weighed at three separate intervals; prior to being added to the wash, at the end of the wash cycle, and at the end of the first spin cycle. The weights obtained at these three intervals are given below. The weight of an empty pouch was determined to be about 0.5 grams.

Test Wash C

	Initial Wt. of Product & Additive (Grams)	Wt. of Pouch & Additive at End of Wash (Grams)	Wt. of Pouch & Additive at End of 1st Spin Cycle (Grams)
20	34.8	34.2	4.0
25	34.4	34.0	3.1

The above results show that substantially all of the additive is released during the first spin cycle while only minor amounts are released during the wash cycle.

Example 3

Six pouches were constructed from a low density polyethylene each having the internal dimensions of 2 inches x 3 inches. To form the pouches, two sheets of equisized material were heat sealed along three marginal edges, leaving the top open. The sheets used were of different thicknesses, one sheet was 1.5 Mils thick while the other was 6 Mils thick. This resulted in each of the pouches having one side which was substantially thicker than the other. A horizontal wall was then formed in each of the pouches by heat sealing the two sheets of polyethylene together 1/2 inch from the top of the pouch. The horizontal wall was spaced 1/4 inch from the heat sealed marginal edges of the pouch, thereby leaving two 1/4 inch orifices in the wall on either side of the pouch. The pouches so constructed were then filled with a fabric softener composition having the viscosity of 2050 centipoise at 80°F and comprised of a cationic fabric softener composition. Each of the pouches was then added to a test wash performed under the conditions of Test Wash D.

Test Wash D consisted of a wash with a 10 minute wash cycle and a 2 minute rinse cycle, where the water temperature of both the wash water and the rinse water was 80°F. One cup of laundry detergent and a load of laundry consisting of: four cotton terry towels, two nylon slips, two acrylic fiber shirts, six fifty percent polyester/fifty percent cotton pillow cases, two polyester pant suits, two nylon nightgowns and one polyester and rayon shirt were added to each wash. The pouches tested were weighed at two intervals, before they were added to the washer, and at the conclusion of all cycles. The values obtained by weighing the pouches are given below. The weight of an empty pouch was approximately 0.5 grams.

After each washing, the load was dried in an automatic dryer for forty-five minutes. The articles of clothing were then tested for softness and found to be soft to the touch.

5

Test Wash D

	<u>Initial Wt. of Pouch and Additive (Grams)</u>	<u>Wt. of Pouch and Additive at Conclusion of All Cycles (Grams)</u>
	25.0	1.0
10	25.0	1.5
	25.0	2.2
	25.0	1.1
	24.2	1.0
	23.3	10.6

15

The above results demonstrate that sufficient quantities of the softener were released to effectively soften the fabrics which were laundered.

Example 4

Three pouches having the internal dimensions of 2 inches x 3 inches were constructed from a low density polyethylene having a 4 Mils thickness. The pouches were constructed in the manner described in Example 3. As in Example 3 each pouch had a horizontal wall measuring 1 1/2 inches in length and spaced 1/4 inch from each of the heat sealed marginal edges, thereby forming two 1/4 inch orifices on either side of the pouch. Each of the three pouches was filled with a cationic fabric softener composition having the viscosity of 860 centipoise at 80°F.

The pouches were each added to a Test Wash E consisting of a 10 minute wash cycle and a 2 minute rinse cycle, where the water temperature of both the wash water and the rinse water was 80°F. In addition to the pouches, fabrics were added to each of the three washes.

The pouches were weighed at three intervals prior to being added to the wash, at the end of the wash cycle and at the end of the first spin cycle. The weights obtained at these intervals are given below. The weight of an empty pouch was about 0.5 grams.

Test Wash E

	Initial Wt. of Pouch & Additive (Grams)	Wt. of Pouch & Additive at End of Wash Cycle (Grams)	Wt. of Pouch & Additive at End of First Spin Cycle (Grams)
15	20.5	20.4	1.8
	21.3	21.3	2.7
	24.3	24.3	3.2

The above results show that substantially all of the additive was released during the first spin cycle, which precedes the rinse cycle.

Example 5

A pouch having the internal dimensions of 1 1/2 inches x 2 inches was constructed from a one Mil thick nylon material. A 1 3/4 inch horizontal wall was formed in the pouch, 1/2 inch from the top of the pouch, thereby leaving a 1/4 inch orifice along one side of the pouch. The pouch was filled with approximately 13.25 grams of a fabric softener composition having the viscosity of about 9 centipoise at 80°F. The pouch was added along with

fabrics to a Test Wash F consisting of a 10 minute wash cycle with a 2 minute rinse cycle where the temperature of both the rinse and wash water was 80°F. The pouch was weighed at two intervals, before being added to the wash and after the conclusion of the wash cycle. The initial weight of the pouch plus the additive was 13.4 grams and the weight of the pouch plus the additive at the conclusion of the wash cycle was 1.4 grams. The weight of the empty pouch was about 0.15 grams.

The above results demonstrate that a substantial amount of the additive, in this case, a fabric softener composition, was released during the wash cycle. The reason for this was a pouch material having a high degree of flexibility was used with a low viscosity additive, and an orifice which was too large to retain the additive.

Example 6

Three pouches having the internal dimensions of 2 inches x 3 inches were constructed from 3 Mils thick low density polyethylene. A 1/4 inch orifice was formed in each of the three pouches, adjacent to the side wall of the pouch by forming a horizontal wall which was 1 3/4 inches in length inside each of the pouches, 1/2 inch from the top. Each of the pouches was filled with approximately 20 grams of a fabric softening composition having the viscosity of approximately 9 centipoise at 80°F and 1 centipoise at 100°F.

The pouches were each added to Test Wash G. Test Wash G consisted of a 10 minute wash cycle and a 2 minute rinse cycle, where the wash water temperature

was 100°F and the rinse water temperature was 80°F. Fabrics were added to each wash along with one of the pouches. The pouches were weighed at several intervals, prior to being added to the wash, at the end of the wash cycle, at the end of the rinse cycle and before the final spin, and at the conclusion of all cycles of the machine. The weights obtained at these intervals are given below. The weight of an empty pouch was approximately 0.5 grams.

Test Wash G.

	<u>Pouch 1</u>	<u>Pouch 2</u>	<u>Pouch 3</u>
Initial Weight of Pouch & Additive (Grams)	20.4	18.1	19.8
Weight of Pouch & Additive after Wash Cycle (Grams)	20.4	18.1	19.8
Weight of Pouch & Additive after First Spin Cycle (Grams)	7.2	17.8	11.0
Weight of Pouch & Additive after rinse (Grams)	7.2	17.8	11.0
Weight of Pouch & Additive at Conclusion of All Cycles (Grams)	7.2	17.2	10.9

With the exception of the second pouch, substantially all of the additive released contained in the pouches was released during the first spin cycle. The second pouch failed to release due to the fact that it got caught up with the fabrics in the machine.

Example 7

Eight pouches having the internal dimensions of 2 inches x 3 inches were constructed from a low density polyethylene material. To form each of the pouches two sheets of equisized material were heat sealed along three marginal edges, leaving the top open. The sheets used were of different thicknesses, one sheet was 1.5 Mils thick while the other was 6 Mils thick. A horizontal wall was then formed in each of the pouches by heat sealing the two sheets of polyethylene together 1/2 inch from the top of the pouch. The horizontal wall was spaced 1/4 inch from the heat sealed marginal edges of the pouch, thereby leaving two 1/4 inch orifices in the wall on either side of the pouch. The pouches so constructed were then filled with a fabric softener composition having the viscosity of about 35 centipoise at 110°F, about 2,050 centipoise at room temperature, 70°F, and about 4,000 centipoise at 55°F. Four of the pouches were then each added to a test wash performed under the conditions of Test Wash H while the remaining four were each added to a test wash performed under the conditions of Test Wash I.

Test Wash H consisted of a wash with a 10 minute wash cycle and a two minute rinse cycle, where the temperature of the wash water was about 110°F and the temperature of the rinse water was between about 42°F-45°F. Test Wash I consisted of a wash with a 10 minute wash cycle and a two minute rinse cycle where the temperature of the wash water was about 110°F and the temperature of the rinse water was between about 45°F-48°F. One cup of laundry detergent and a load of fabrics were added to each of the test washes.

The eight pouches were weighed at three intervals, before being added to a wash, at the end of the wash cycle and at the conclusion of all cycles. The weight of an empty pouch was approximately 0.5 grams.

5

Test Wash H

	<u>Pouch #</u>	<u>Initial Wt. of Pouch & Product</u>	<u>Post Wash Wt. of Pouch & Product</u>	<u>Wt. of Pouch & Product at the Conclusion of All Cycles</u>
10	1	24.4g	4.4g	1.4g
	2	23.8g	13.6g	12.2g
	3	24.9g	3.2g	2.8g
	4	23.6g	6.3g	4.2g

Test Wash I

15

	<u>Pouch #</u>	<u>Initial Wt. of Pouch & Product</u>	<u>Post Wash Wt. of Pouch & Product</u>	<u>Wt. of Pouch & Product at the Conclusion of All Cycles</u>
	1	24.5g	5.0g	3.0g
20	2	24.5g	4.2g	2.6g
	3	24.8g	6.4g	3.2g
	4	25.3g	4.3g	2.5g

The results of Test Washes H and I demonstrate that a substantial amount of the additive, in this case a fabric softener composition, was released during the wash cycle. The reason for this is due to the fact that

25

the additive used has a low viscosity at high wash water temperatures. When such an additive is used, the flexibility of the material used to form the pouch should be decreased and the size of the orifice or
5 orifices should be decreased.

Having described some typical embodiments of the invention, it is not our intent to be limited to the specific details set forth herein. Rather, we wish to reserve to ourselves any variations or modifications that
10 may appear to those skilled in the art and fall within the scope of the following claims.

FIG. 1

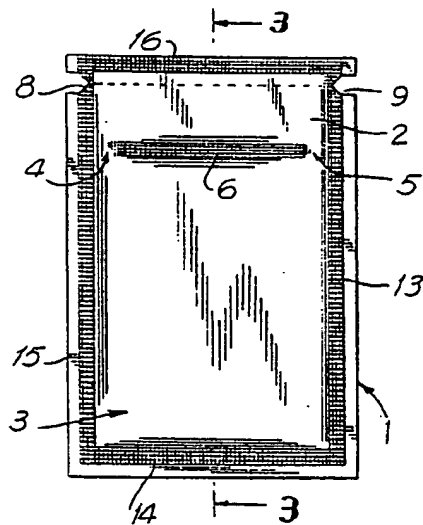


FIG. 2

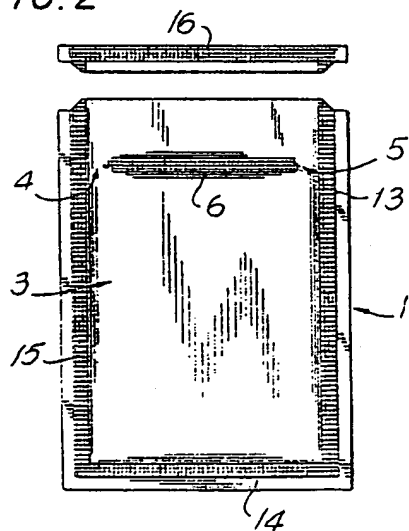


FIG. 3

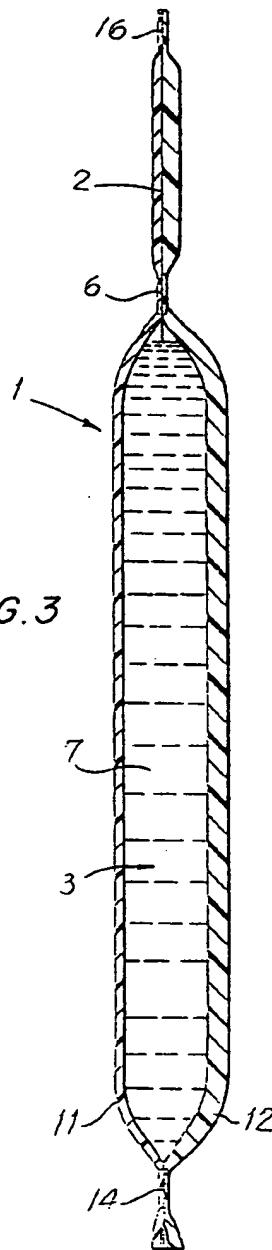


FIG. 5

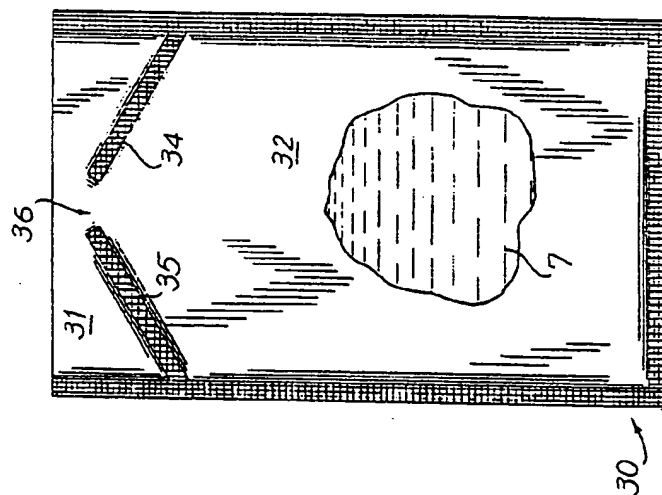
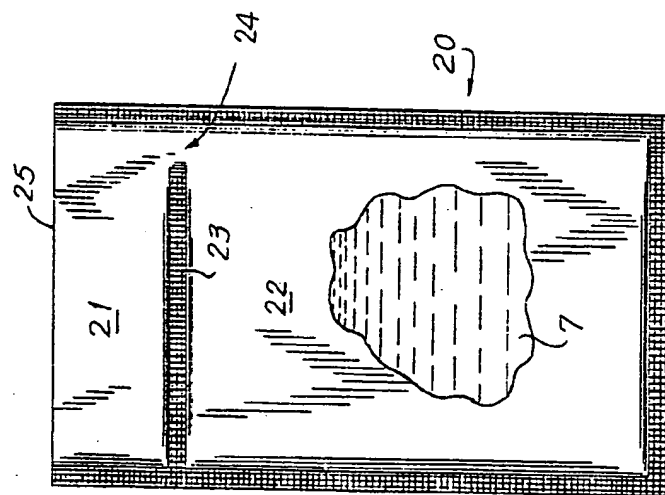


FIG. 4



II. Claims:

What is claimed is:

1. A dispenser for automatically dispensing
a rinse water additive during the rinse cycle of a washing
5 machine comprising:

a collapsible water insoluble pouch having
an open top;

10 a wall disposed within the pouch wherein the
wall divides the pouch into an upper and a
lower chamber wherein the upper chamber is
at least 1/4 inch in length as measured from
the top of the pouch to the wall;

15 at least one orifice from about 1/8 inch to
1 inch in length located in the wall between
the upper and lower chambers; and

an effective amount of a rinse water additive
having a viscosity of from that of water to
that of a gel contained in the lower chamber;

20 whereby the additive will be retained in the
pouch until it is forced out by the centrifugal
force created during the spin cycle of the
washer.

2. The dispenser of Claim 1 wherein the pouch
is made from a material selected from the group consisting
25 of polyethylene, polypropylene, paper laminate, nylon and

polystyrene, aluminum foil, flexible vinyls, vinylidene resins, polyester, polyurethane, ionomer, and laminates thereof; and wherein said material has a thickness of from about 1 Mil to about 50 Mils.

- 5 3. The dispenser of Claim 1 wherein the rinse water additive is selected from the group consisting of cationic fabric softeners dispersed in water, alcohol or other suitable solvent; anti-resoil agents; bacteriocides; optical brighteners; anti-static agents which are not of
10 the cationic softener types; enzymes; bleaches; detergents and detergent additives.
4. The dispenser of Claim 2 wherein the pouch is rectangular in shape; and wherein the rinse water additive is a cationic fabric softener dispersed in water,
15 alcohol or other suitable solvent.
5. The dispenser of Claim 4 wherein the wall is horizontal.
6. The dispenser of Claim 4 wherein the wall is comprised of two diagonally opposed members.
- 20 7. The dispenser of Claim 5 wherein the internal dimensions of the pouch are 1-1/2 inches x 2-1/2 inches; wherein the wall is placed 1/2 inch from the top of the pouch; and having one orifice which is about 1/4 inch in length.
- 25 8. The dispenser of Claim 7 wherein the pouch is made from a low density polyethylene having a thickness of about 4 Mils; and wherein the rinse water additive has a viscosity of approximately 105 centipoise.

9. The dispenser of Claim 5 having two orifices; each of said orifices being 1/4 inch in length and located adjacent to opposite side walls of said pouch; wherein the internal dimensions of the pouch are 2 inches x 3 inches; wherein the wall which divides the upper chamber from the lower chamber is 1/2 inch from the top of said pouch; and wherein the wall is spaced 1/4 inch from either side of the pouch.
10. The dispenser of Claim 9 wherein the pouch is fabricated from two pieces of low density polyethylene, having a thickness of about 3 Mils.
11. The dispenser of Claim 9 wherein the pouch is fabricated from two pieces of low density polyethylene, a first piece and a second piece; wherein said first piece has a thickness of 1.5 Mils and wherein said second piece has a thickness of 6.0 Mils.
12. The dispenser of Claim 11 wherein the additive is a cationic fabric softener composition having a viscosity of between about 2000 centipoise to about 4000 centipoise.
13. The dispenser of Claims 10 or 11 further comprising a shipping seal formed along the top of the pouch; and a first and second notch located on either side of the pouch below said shipping seal.
14. The method of treating laundry with a rinse water additive which comprises releasing a rinse water additive into the rinse water of an automatic washer by adding along with the laundry and detergent at the beginning of the wash cycle, the dispenser of Claim 1.

22. The method of Claim 21 wherein the pouch
is constructed from two sheets of material, a first piece
and a second piece, wherein said first piece has a thick-
ness of 1.5 Mils; and wherein said second piece has a
5 thickness of about 6.0 Mils.

23. The method of Claim 22 wherein the rinse
water additive has the viscosity of from about 2000
centipoise to about 4000 centipoise.



15. The method of Claim 14 wherein the pouch is rectangular in shape; and wherein the pouch is made from a low density polyethylene, having a thickness from about 1 Mil to about 6 Mils.

5 16. The method of Claim 15 wherein the additive is a cationic fabric softener dispersed in water, alcohol or other suitable solvent.

10 17. The method of Claim 16 wherein the internal dimensions of the pouch are about 1 inch x 2-1/2 inches; and wherein the wall divides the pouch so that the relative lengths of the upper chamber to the lower chamber are about 1 to about 4.

15 18. The method of Claim 17 wherein the pouch has a single orifice; and wherein the orifice is 1/4 inch in length.

19. The method of Claim 18 wherein the wall is horizontal; and wherein the orifice is adjacent to the side wall of the pouch.

20 20. The method of Claim 16 wherein the wall is comprised of two equisized opposite diagonal members; and wherein the orifice is located in between said diagonal members.

25 21. The method of Claim 16 wherein the pouch has the internal dimensions of 2 inches x 3 inches; wherein the wall which divides the upper chamber from the lower chamber is disposed 1/2 inch from the top of said pouch; wherein said wall is horizontal; and wherein said wall is spaced 1/4 inch from each side of the pouch; and wherein the pouch has two orifices located in the 1/4 inch space
30 between the wall and the side of the pouch.